

IN THE CLAIMS

Please amend the status of the claims as indicated below:

Claims 1-71 (canceled)

72. (new) A purified polypeptide that binds to neoplastic cells, said polypeptide comprising an amino acid sequence substantially identical to a sequence selected from the group consisting of SEQ ID NO:1, SEQ ID NO:3 and a combination thereof.

73. (new) The purified polypeptide according to Claim 72, wherein said polypeptide specifically binds to BXPC-3 (ATCC Accession No. CRL-1687), 23132/87 (DSMZ Accession No. ACC 201), COLO-206F (DSMZ Accession No. ACC 21), COLO-699 (DSMZ Accession No. ACC 196), and LOU-NH91 (DSMZ Accession No. ACC 393) cells and not to a non-neoplastic cell.

74. (new) The purified polypeptide according to Claim 72, wherein said polypeptide specifically binds to BXPC-3 (ATCC Accession No. CRL-1687), 23132/87 (DSMZ Accession No. ACC 201), COLO-206F (DSMZ Accession No. ACC 21), COLO-699 (DSMZ Accession No. ACC 196) and LOU-NH91 (DSMZ Accession No. ACC 393) cells and not to non-neoplastic cells, and wherein said neoplastic cell is an adenocarcinoma of the lung, a squamous cell lung carcinoma, an intestinal-type gastric carcinoma, a diffuse-type gastric carcinoma, an adenocarcinoma of the colon, an adenocarcinoma of the prostate, a squamous cell carcinoma of the esophagus, an adenocarcinoma of the esophagus, an adenocarcinoma of the esophagus, a lobular

carcinoma of the breast, a ductal carcinoma of the breast, an adenocarcinoma of the pancreas, an adenocarcinoma of the ovary and an adenocarcinoma of the uterus.

75. (new) The purified polypeptide according to Claim 72, wherein said polypeptide specifically binds to an adenocarcinoma of the lung, a squamous cell lung carcinoma, an intestinal-type gastric carcinoma, a diffuse-type gastric carcinoma, an adenocarcinoma of the colon, an adenocarcinoma of the prostate, a squamous cell carcinoma of the esophagus, an adenocarcinoma of the esophagus, an adenocarcinoma of the esophagus, a lobular carcinoma of the breast, a ductal carcinoma of the breast, an adenocarcinoma of the pancreas, an adenocarcinoma of the ovary and an adenocarcinoma of the uterus, and not to a non-neoplastic cell.

76. (new) The purified polypeptide according to Claim 72, wherein said polypeptide comprises an antibody or a functional fragment of said antibody.

77. (new) The purified polypeptide according to Claim 76, wherein said polypeptide is said functional fragment of said antibody selected from the group consisting of V_L , V_H , F_v , F_c , Fab , Fab' and $F(ab')_2$.

78. (new) The purified polypeptide according to Claim 77, wherein said polypeptide includes an amino acid sequence of a variable region of a light chain (V_L) substantially identical to SEQ ID NO:1, or an amino acid sequence of a variable region of a heavy chain (V_H) substantially identical to SEQ ID NO:3, or both said amino acid sequences.

79. (new) The purified polypeptide according to Claim 77, wherein said polypeptide includes a nucleic acid sequence of a variable region of a light chain (V_L) substantially identical to SEQ ID NO:2, or a nucleic acid sequence of a variable region of a heavy chain (V_H) substantially identical to SEQ ID NO:4, or both said nucleic acid sequences.

80. (new) The purified polypeptide according to Claim 77, wherein said functional fragment comprises a fragment of the sequence of SEQ ID NO:1 and SEQ ID NO:3.

81. (new) The purified polypeptide according to Claim 77, wherein said functional fragment comprises a fragment that is substantially identical to the sequence of SEQ ID NO:1 or SEQ ID NO:3.

82. (new) The purified polypeptide according to Claim 72, wherein said polypeptide comprises a sequence that is substantially identical to the amino acid sequence of SEQ ID NO:1.

83. (new) The purified polypeptide according to Claim 72, wherein said polypeptide comprises a sequence that is substantially identical to the amino acid sequence of SEQ ID NO:3.

84. (new) The purified polypeptide according to Claim 72, wherein said polypeptide comprises nucleic acid sequences that are substantially identical to nucleotides 67-99 (CDR1), 145-165 (CDR2) and 262-288 (CDR3) of SEQ ID NO:2.

85. (new) The purified polypeptide according to Claim 72, wherein said polypeptide comprises nucleic acid sequences that are substantially identical to nucleotides 91-105 (CDR1), 148-198 (CDR2) and 295-330 (CDR3) of SEQ ID NO:4.

86. (new) The purified polypeptide according to Claim 72, wherein said polypeptide includes at least one complementary-determining regions (CDR) or functional fragments thereof comprising an amino acid sequence substantially identical to an amino acid sequence selected from the group consisting of [Ser-Gly-Asp-Lys-Leu-Gly-Asp-Lys-Tyr-Ala-Cys (CDR1) or Gln-Asp-Ser-Lys-Arg-Pro-Ser (CDR2) or Gln-Ala-Trp-Asp-Ser-Ser-Ile-Val-Val (CDR3) of SEQ ID NO:1], [Ser-Tyr-Ala-Met-His (CDR1) or Val-Ile-Ser-Tyr-Asp-Gly-Ser-Asn-Lys-Tyr-Tyr-Ala-Asp-Ser-Val-Lys-Gly (CDR2) or Asp-Arg-Leu-Ala-Val-Ala-Gly-Lys-Thr-Phe-Asp-Tyr (CDR3) SEQ ID NO:3] and a combination thereof.

87. (new) The purified polypeptide according to Claim 72, wherein said polypeptide is a monoclonal antibody.

88. (new) A purified polypeptide comprising an amino acid sequence selected from the group consisting of SEQ ID NO:1, SEQ ID NO:3 and a combination thereof.

89. (new) A cell expressing a polypeptide selected from the group consisting of:
said polypeptide comprising an amino acid sequence substantially identical to a sequence selected from the group consisting of SEQ ID NO:1, SEQ ID NO:3 and a combination thereof, and wherein said polypeptide specifically binds to BXPC-3 (ATCC

Accession No. CRL-1687), 23132/87 (DSMZ Accession No. ACC 201), COLO-206F (DSMZ Accession No. ACC 21), COLO-699 (DSMZ Accession No. ACC 196), and LOU-NH91 (DSMZ Accession No. ACC 393) cells and not to a non-neoplastic cell;

said polypeptide comprising at least one complementary-determining regions (CDR) or functional fragments thereof comprising an amino acid sequence substantially identical to an amino acid sequence selected from the group consisting of [Ser-Gly-Asp-Lys-Leu-Gly-Asp-Lys-Tyr-Ala-Cys (CDR1) or Gln-Asp-Ser-Lys-Arg-Pro-Ser (CDR2) or Gln-Ala-Trp-Asp-Ser-Ser-Ile-Val-Val (CDR3) of SEQ ID NO:1], [Ser-Tyr-Ala-Met-His (CDR1) or Val-Ile-Ser-Tyr-Asp-Gly-Ser-Asn-Lys-Tyr-Tyr-Ala-Asp-Ser-Val-Lys-Gly (CDR2) or Asp-Arg-Leu-Ala-Val-Ala-Gly-Lys-Thr-Phe-Asp-Tyr (CDR3) SEQ ID NO:3] and a combination thereof; and,

said polypeptide comprising an amino acid sequence substantially identical to a sequence selected from the group consisting of SEQ ID NO:1, SEQ ID NO:3 and a combination thereof, wherein said polypeptide specifically binds to an adenocarcinoma of the lung, a squamous cell lung carcinoma, an intestinal-type gastric carcinoma, a diffuse-type gastric carcinoma, an adenocarcinoma of the colon, an adenocarcinoma of the prostate, a squamous cell carcinoma of the esophagus, an adenocarcinoma of the esophagus, an adenocarcinoma of the esophagus, a lobular carcinoma of the breast, a ductal carcinoma of the breast, an adenocarcinoma of the pancreas, an adenocarcinoma of the ovary and an adenocarcinoma of the uterus, and not to a non-neoplastic cell.

90. (new) A cell expressing a polypeptide comprising a sequence substantially identical to an amino acid sequence selected from the group consisting of SEQ ID NO:1,

SEQ ID NO:3 and a combination thereof.

91. (new) The cell expressing a polypeptide according to Claim 90, wherein said cell is a hybridoma.

92. (new) A method for generating a hybridoma cell expressing a polypeptide comprising a sequence substantially identical to an amino acid sequence selected from the group consisting of SEQ ID NO:1, SEQ ID NO:3 and a combination thereof, said method comprising the steps of:

contacting lymphocytes with a heteromyeloma cell line under conditions resulting in a fusion of a lymphocyte with a heteromyeloma cell, said fusion resulting in a hybridoma;

determining whether said hybridoma produces a polypeptide that inhibits proliferation in a neoplastic cell to which it binds, but does not inhibit proliferation in a non-neoplastic cell; and,

determining whether said hybridoma produces a polypeptide that specifically binds to BXPC-3 (ATCC Accession No. CRL-1687), 23132/87 (DSMZ Accession No. ACC 201), COLO-206F (DSMZ Accession No. ACC 21), COLO-699 (DSMZ Accession No. ACC 196) and LOU-NH91 (DSMZ Accession No. ACC 393) cells and not to non-neoplastic cells.

93. (new) A method for generating a hybridoma cell expressing a polypeptide comprising a sequence substantially identical to an amino acid sequence selected from the group consisting of SEQ ID NO:1, SEQ ID NO:3 and a combination thereof, said

method comprising the steps of:

contacting lymphocytes with a heteromyeloma cell line under conditions resulting in a fusion of a lymphocyte with a heteromyeloma cell, said fusion resulting in a hybridoma;

determining whether said hybridoma produces a polypeptide that induces intracellular accumulation of lipids in a neoplastic cell to which it binds, but does not induce intracellular accumulation of lipids in a non-neoplastic cell;

determining whether said hybridoma produces a polypeptide that specifically binds to BXPC-3 (ATCC Accession No. CRL-1687), 23132/87 (DSMZ Accession No. ACC 201), COLO-206F to which it binds, but does not induce intracellular accumulation of lipids in a non-neoplastic cell; and,

determining whether said hybridoma produces a polypeptide that specifically binds to BXPC-3 (ATCC Accession No. CRL-1687), 23132/87 (DSMZ Accession No. ACC 201), COLO-206F (DSMZ Accession No. ACC 21), COLO-699 (DSMZ Accession No. ACC 196) and LOU-NH91 (DSMZ Accession No. ACC 393) cells and not to non-neoplastic cells.

94. (new) A method for generating a hybridoma cell expressing a polypeptide comprising a sequence substantially identical to an amino acid sequence selected from the group consisting of SEQ ID NO:1, SEQ ID NO:3 and a combination thereof, said method comprising the steps of:

contacting lymphocytes with a heteromyeloma cell line under conditions resulting in a fusion of a lymphocyte with a heteromyeloma cell, said fusion resulting in a

hydridoma;

determining whether said hydridoma produces a polypeptide that induces apoptosis of a neoplastic cell to which it binds, but does not induce apoptosis of a non-neoplastic cell; and,

determining whether said hydridoma produces a polypeptide that specifically binds to BXPC-3 (ATCC Accession No. CRL-1687), 23132/87 (DSMZ Accession No. ACC 201), COLO-206F (DSMZ Accession No. ACC 21), COLO-699 (DSMZ Accession No. ACC 196) and LOU-NH91 (DSMZ Accession No. ACC 393) cells and not to non-neoplastic cells.

95. (new) An isolated nucleic acid molecule comprising the sequence of SEQ ID NO:2 or SEQ ID NO:4.

96. (new) The isolated nucleic acid molecule according to Claim 95, wherein said nucleic acid molecule is comprised within a vector.

97. (new) The isolated nucleic acid molecule according to Claim 96, wherein said vector is comprised within a cell.